

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau(43) International Publication Date
9 October 2003 (09.10.2003)

PCT

(10) International Publication Number
WO 03/083849 A1(51) International Patent Classification⁷: **G11B 7/085, 7/09**

(21) International Application Number: PCT/IB03/00614

(22) International Filing Date: 17 February 2003 (17.02.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
02076224.1 29 March 2002 (29.03.2002) EP(71) Applicant (for all designated States except US): **KONINKLIJKE PHILIPS ELECTRONICS N.V.** [NL/NL];
Groenewoudseweg 1, NL-5621 BA Eindhoven (NL).

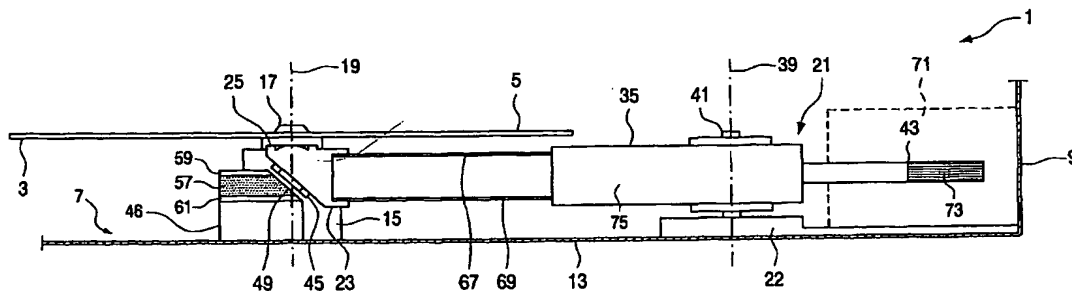
(72) Inventor; and

(75) Inventor/Applicant (for US only): **ROSMALEN, Gerard, E.** [NL/NL]; c/o Prof. Holstlaan 6, NL-5656 AA Eindhoven (NL).(74) Agent: **SCHRIJNEMAEEKERS, Hubert, J., M.**; Internationaal Octrooibureau B.V., Prof. Holstlaan 6, NL-5656 AA Eindhoven (NL).(81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.(84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).**Published:**

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: OPTICAL DISC APPARATUS FOR RECORDING AND/OR REPRODUCING INFORMATION ON/FROM AN INFORMATION SURFACE OF A ROTATABLE OPTICAL DISC



(57) **Abstract:** An optical disc apparatus (1) for recording and/or reproducing information on/from an information surface (3) of a rotatable optical disc (5). The apparatus comprises a supporting assembly (7), a spindle motor (15), associated with the supporting assembly (7), having a spindle (17) with a spindle axis (19) for rotating the optical disc (5), an optical lens unit (21) associated with the supporting assembly (7) for scanning an information surface (3) of said optical disc (5) mounted on the spindle (17), and comprising a focussing lens assembly (23), a swing arm assembly (35) which is rotatable about a swing axis (39), comprising movable magnetic focussing means (45) provided near a free end (37) of the swing arm assembly (35), for driving the said focussing lens (29) along said focussing axis (31) so as to focus said optical beam (33) on the optical disc information surface (3), and stationary magnetic focussing means (46) magnetically cooperating through an intermediate air gap (48) with the movable focussing means (45). The stationary and movable magnetic focussing means (46, 45) are disposed and cooperate with the movable magnetic focussing means (45) such that the force vector component (P) intersects a focussing lens area (27) bounded by a focussing lens periphery (29).



WO 03/083849 A1